

IN THE CLAIMS:

Please AMEND claims 1, 4 and 5 and ADD new claims 8-9 in accordance with the following:

1. (CURRENTLY AMENDED) An electric motor comprising:
a stator core having main teeth and auxiliary teeth, each of the auxiliary teeth being formed in a slot between adjacent ones of the main teeth; and
coils respectively formed around said main teeth with said auxiliary teeth intervening adjacent ones of said coils.
2. (ORIGINAL) An electric motor according to claim 1, wherein each of said auxiliary teeth has a shape such as to fill a gap between the adjacent ones of said coils.
3. (ORIGINAL) An electric motor according to claim 1, wherein a torque and/or a cogging amount of the electric motor are adjusted by setting of lengths of said auxiliary teeth.
4. (CURRENTLY AMENDED) ~~An electric motor according to claim 3,~~ An electric motor comprising:
a stator core having main teeth and auxiliary teeth, each of the auxiliary teeth being formed in a slot between adjacent ones of the main teeth; and
coils respectively formed around said main teeth with said auxiliary teeth intervening adjacent ones of said coils,
wherein a torque and/or a cogging amount of the electric motor are adjusted by setting of lengths of said auxiliary teeth ~~wherein and~~ lengths of said auxiliary teeth are set to be maximum values not greater than lengths of said main teeth and with which the electric motor has a cogging amount within an allowable amount.
5. (CURRENTLY AMENDED) ~~An electric motor according to claim 3,~~ An electric motor comprising:
a stator core having main teeth and auxiliary teeth, each of the auxiliary teeth being formed in a slot between adjacent ones of the main teeth; and
coils respectively formed around said main teeth with said auxiliary teeth intervening adjacent ones of said coils,
wherein a torque and/or a cogging amount of the electric motor are adjusted by setting of lengths of said auxiliary teeth ~~wherein and~~ lengths of said auxiliary teeth are set to be values not

greater than lengths of said main teeth and with which the electric motor has a minimum cogging amount.

6. (ORIGINAL) An electric motor according to claim 1, wherein said stator core has a cylindrical shape to constitute a rotary motor.

7. (ORIGINAL) An electric motor according to claim 1, wherein said stator core has a straight shape to constitute a linear motor.

8. (NEW) An electric motor comprising:
a stator core comprising:
a plurality of first teeth, and
a second tooth disposed between the first teeth; and
a plurality of coils around said first teeth,
wherein a length of said second tooth corresponds to a cogging amount of the electric motor which is within an allowable amount.

9. (NEW) An electric motor comprising:
a stator core comprising:
a plurality of first teeth, and
a second tooth disposed between the first teeth; and
a plurality of coils around said first teeth,
wherein a length of said second tooth corresponds to a minimum cogging amount of the electric motor.